

REMARKS

In the Office Action of June 25, 2008, the Examiner rejected claims 7, 10-14 and 17-20 under 35 USC 102(e) as being anticipated by Meyer, et al (Meyer). Claims 8, 9, 15 and 16 were rejected under 35 USC 103(a) as being unpatentable over Meyer in view of Staak, et al (Staak).

By the present amendment, applicants have clarified certain structural features of the invention not shown or suggested by the references relied on by the Examiner. Specifically, independent claim 8 defines a bulk material cooler with a cooling grate made up of a number of adjacently arranged elongate bottom elements. The upper sides of the bottom elements comprise gabled-roof-shaped V profiles arranged space apart mirror-symmetrically opposite one another, but offset in relation to one another, such a first set of V profiles are inverted and completely overlie a lower set of V profiles. The V legs engage one another with an intermediate space, which space forms a labyrinth for the material to be cooled.

The primary reference relied on by the Examiner, Meyer, discloses a bulk material cooler in which the bottom elements of the cooling grate comprise a plurality of planks formed by hollows 14 divided by walls 13. The bulk material is prevented from falling through between the planks by U-shaped channels 32 positioned below the planks with downwardly depending strips 34 from adjacent planks extending into the channels 32 with a space 35 (FIG. 7) between the walls 33 and the strips 34.

The Examiner relied on the teachings of Staak in which the Examiner asserted that Staak discloses an embodiment where the profiles form a V-shaped profile. In fact, what Staak teaches is a cooling grate, which remains stationary. The grate is made up of a plurality of profiles and, with respect to the profile embodiment referred to by the Examiner, shown in FIG. 1, the profile is a Z-shape (paragraph 21) in which the profiles are described as having a central part 41, and outer parts 42, 43 which are angled in opposite directions to the central part. One end leg of the Z of one profile overlies a single end leg of the next profile such that a short channel 5 is provided between adjacent profiles.

The structure of the present invention has been to define more clearly in claim 8 in which the upper sides of the bottom elements are defined as gabled-roof-shaped V profiles arranged spaced apart mirror-symmetrically opposite one another, but offset in relation to one another, such that a first set of V profiles are inverted and completely overlie a lower set of V profiles. This structural arrangement is distinct and different from that shown in Staak, and therefore is not taught or suggested by Staak.

The Z-shaped profile (paragraph 27) of Staak results in an air flow moving in a single direction, as denoted by the arrow below reference numeral 5 in the center portion of FIG. 1 which is angled in the direction of the flow of bulk material shown by arrow 9. With the completely overlying, but offset the profiles as defined in claim 8, the result is an air flow in two different directions which is beneficial in applicants' arrangement, but which would be detrimental in the arrangement proposed by Staak.

In view of the structural differences, applicants respectfully submits that independent claim 8, and its dependent claims, are patentably distinguishable over the combination of references relied on by the Examiner.

Independent claim 15 has also been amended similarly to independent claim 8 and for the same reasons, applicants respectfully submit that independent claim 15, and its dependent claims, are each patentably distinguishable over the combination of references relied on by the Examiner.

Claim 11 has been re-written in independent form and defines the bulk material cooler, and in particular, overlapping longitudinal webs, which have horizontal overlapping areas such that a horizontal sealing gap tending toward zero is formed in each case.

The Examiner relied only on the teachings of Meyer with respect to claim 11 as initially presented. The Examiner asserted that Meyer teaches a gap between adjacent bottom elements as being sealed with a sealing profile 47 where the side cheeks 46 of the bottom elements are engaged (see FIG. 10; column 9, lines 65 – column 10, line 5) and with the sealing profile reducing the sealing gap towards zero. The sealing gap in Meyer is a vertical gap between the cheek plates 46 and the downwardly depending lateral limbs of the inverted U-shape of the sealing profile 47. Thus, the structural arrangement taught by Meyer is distinctly different from that specifically defined in independent claim 11. Therefore, applicants respectfully submit that independent claim 11, and its dependent claims, is patentably distinguishable over Meyer.

Claim 18 has been re-written in independent form and defines the same structural arrangement as defined in independent claim 11. For the reasons set forth above with respect to independent claim 11, applicants respectfully submit that independent claim 18 and its dependent claims are each patentably distinguishable over Meyer.

In view of the foregoing amendments and remarks, applicants respectfully submit that all of the claims of the application are now in allowable form. Applicants request the Examiner to indicate all claims as allowed and to pass the application to issue.

Respectfully submitted,

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